

Appl. No. 09/781,695
Amdt. dated November 22, 2006
Reply to Office Action of July 27, 2006

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

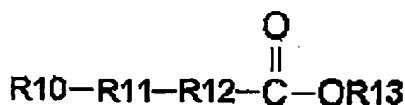
Listing of Claims:

Claims 1 - 12 (Canceled)

Claim 13. (Currently Amended) ~~The method of claim 12,~~ A method of inducing production of isoflavones in a plant comprising applying to the surface of at least part of a plant, which plant is capable of producing an isoflavone, a biologically effective amount of a composition comprising:

a) a nuclear receptor ligand, wherein said nuclear receptor ligand is a peroxisome proliferator having structure V below,

V



wherein R10 is an aromatic ring or rings, or a substituted aromatic ring or rings,

R11 is an O or S,

R12 is a branched aliphatic chain comprising from 3 to 8 carbon atoms,

R13 is a hydrogen or an aliphatic chain comprising from 1 to 5 carbon atoms; and

b) one or more enhancing compounds that i) enhance the release of isoflavones from sugar conjugates, ii) enhance the incorporation of aglycones into glyceollin, or iii) enhance the release of isoflavones from sugar conjugates and incorporation of aglycones into glyceollin, wherein the

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enhancing compound is selected from the group consisting of orthovanadate, rose bengal, ~~or a~~
and tetrazolium redox dye.

Claim 14. (Currently Amended): The method of claim ~~[[12]]~~ 13, wherein the enhancing compound is a copper salt or a fragment of the naturally occurring cell wall glucan from *Phytophthora sojae*.

Claim 15. (Currently Amended): The method of claim ~~[[12]]~~ 13, wherein the composition further comprises one or more compounds chosen from phytologically acceptable diluents and adjuvants.

Claim 16. (Currently Amended): The method of claim ~~[[12]]~~ 13, wherein the composition further comprises one or more active chemicals chosen from herbicides, insecticides, fungicides, and bacteriocides.

Claim 17. (Currently Amended): The method of claim ~~[[12]]~~ 13, wherein the composition is applied to the plant stem, the plant root, the plant leaf, or combinations thereof.

Claim 18. (Currently Amended): The method of claim ~~[[12]]~~ 13, wherein the composition is applied to a seed or a seedling.

Claim 19. (Currently Amended): The method of claim ~~[[12]]~~ 13, wherein the composition is applied to a legume chosen from alfalfa, lima bean, pinto bean, chickpea, peanuts, and soybean.

Claim 20. (Previously Presented): The method of claim 19, wherein the legume is soybean.

Claims 21-22 (Canceled)

Claim 23. (Currently Amended) A composition for inducing disease resistance in a plant or seed, comprising:

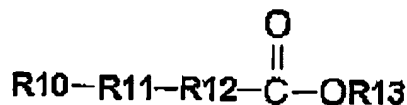
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(a) one or more nuclear receptor ligands having structure V below:

V



wherein R10 is an aromatic ring or rings, or a substituted aromatic ring or rings,

R11 is an O or S,

R12 is a branched aliphatic chain comprising from 1 to 8 carbon atoms,

R13 is a hydrogen or an aliphatic chain comprising from 1 to 5 carbon atoms; and

(b) one or more enhancing compounds that i) enhance the release of isoflavones from sugar conjugates in the plant or seed, ii) enhance incorporation of aglycones in the plant or seed into glyceollin, or iii) enhance release of isoflavones from sugar conjugates in the plant or seed and incorporation of aglycones in the plant or seed into glyceollin,

wherein the enhancing compound is chosen from ion effectors, ~~orthovanadate~~, rose bengal and tetrazolium redox dyes.

Claims 24- 43 (Canceled)